ELSEVIER

Hearing Research 168 (2002) 250–251

HEARING RESEARCH

www.elsevier.com/locate/heares

Author Index Volume 168

Albert, M., see Langner, G. (168) 110

Batra, R., see Fitzpatrick, D.C. (168) 79
Batra, R. and Fitzpatrick, D.C.
Monaural and binaural processing in the ventral nucleus of the lateral lemniscus: a major source of inhibition to the inferior colliculus (168) 90
Bauer, E.E., see Pollak, G.D. (168) 60
Berrebi, A.S., see Kulesza Jr., R.J. (168) 12
Briede, T., see Langner, G. (168) 110
Burger, R.M., see Pollak, G.D. (168) 60

Caspary, D.M., Palombi, P.S. and Hughes, L.F.
GABAergic inputs shape responses to amplitude modulated stimuli in the inferior colliculus (168) 163
Chen, Q.C., see Jen, P.H.-S. (168) 139
Chen, Q.C., see Jen, P.H.-S. (168) 196
Chernock, M.L., see Winer, J.A. (168) 181
Cheung, S.W., see Winer, J.A. (168) 181

Ding, D., see Wang, J. (168) 238

Faingold, C.L.
Role of GABA abnormalities in the inferior colliculus pathophysiology – audiogenic seizures (168) 223
Fitzpatrick, D.C., see Batra, R. (168) 90
Fitzpatrick, D.C., Kuwada, S. and Batra, R.
Transformations in processing interaural time differences between the superior olivary complex and inferior colliculus: beyond the Jeffress model (168) 79

Garcia-Cairasco, N.
A critical review on the participation of inferior colliculus in acoustic-motor and acoustic-limbic networks involved in the expression of acute and kindled audiogenic seizures (168) 208
Goldstein-Daruech, N., Pedemonte, M., Inderkum, A. and Velluti, R.A.
Effects of excitatory amino acid antagonists on the activity of inferior colliculus neurons during sleep and wakefulness (168) 174

Hartung, K., see Trahiotis, C. (168) 55
Henderson Sabes, J., see Sinex, D.G. (168) 150
Hughes, L.F., see Caspary, D.M. (168) 163
Hurley, L.M., Thompson, A.M. and Pollak, G.D.
Serotonin in the inferior colliculus (168) 1

Inderkum, A., see Goldstein-Daruech, N. (168) 174

Jen, P.H.-S., Wu, F.J. and Chen, Q.C.
The effect of two-tone stimulation on responses of two simultaneously recorded neurons in the inferior colliculus of the big brown bat, *Eptesicus fuscus* (168) 139
Jen, P.H.-S., Zhou, X., Zhang, J., Chen, Q.C. and Sun, X.
Brief and short-term corticofugal modulation of acoustic signal processing in the bat midbrain (168) 196

Kelly, J.B., see Ma, C.L. (168) 25
Kelly, J.B. and Zhang, H.
Contribution of AMPA and NMDA receptors to excitatory responses in the inferior colliculus (168) 35
Klug, A., see Pollak, G.D. (168) 60
Kulesza Jr., R.J., Viñuela, A., Saldaña, E. and Berrebi, A.S.
Unbiased stereological estimates of neuron number in subcortical auditory nuclei of the rat (168) 12
Kuwada, S., see Fitzpatrick, D.C. (168) 79

Langner, G., Albert, M. and Briede, T.
Temporal and spatial coding of periodicity information in the inferior colliculus of awake chinchilla (*Chinchilla laniger*) (168) 110
Larue, D.T., see Winer, J.A. (168) 181
Li, H., see Sinex, D.G. (168) 150
Li, L. and Yue, Q.
Auditory gating processes and binaural inhibition in the inferior colliculus (168) 98

Ma, C.L., see Wu, S.H. (168) 43
Ma, C.L., Kelly, J.B. and Wu, S.H.
AMPA and NMDA receptors mediate synaptic excitation in the rat's inferior colliculus (168) 25

Oliver, D.L., see Wu, S.H. (168) 43

Palombi, P.S., see Caspary, D.M. (168) 163
Park, T.J., see Pollak, G.D. (168) 60
Pedemonte, M., see Goldstein-Daruech, N. (168) 174
Pollak, G.D., see Hurley, L.M. (168) 1
Pollak, G.D., Burger, R.M., Park, T.J., Klug, A. and Bauer, E.E.
Roles of inhibition for transforming binaural properties in the brainstem auditory system (168) 60
Portfors, C.V. and Wenstrup, J.J.
Excitatory and facilitatory frequency response areas in the inferior colliculus of the mustached bat (168) 131

Saldaña, E., see Kulesza Jr., R.J. (168) 12
Salvi, R.J., see Wang, J. (168) 238
Sinex, D.G., Henderson Sabes, J. and Li, H.
Responses of inferior colliculus neurons to harmonic and mistuned complex tones (168) 150
Sivaramakrishnan, S., see Wu, S.H. (168) 43
Sun, X., see Jen, P.H.-S. (168) 196

Thompson, A.M., see Hurley, L.M. (168) 1
Trahiotis, C. and Hartung, K.
Peripheral auditory processing, the precedence effect and responses of single units in the inferior colliculus (168) 55

Velluti, R.A., see Goldstein-Daruech, N. (168) 174
Viñuela, A., see Kulesza Jr., R.J. (168) 12

PII: S0378-5955(02)00531-2

ELSEVIER

Hearing Research 168 (2002) 250–251

HEARING RESEARCH

www.elsevier.com/locate/heares

Author Index Volume 168

Albert, M., see Langner, G. (168) 110

Batra, R., see Fitzpatrick, D.C. (168) 79
Batra, R. and Fitzpatrick, D.C.
Monaural and binaural processing in the ventral nucleus of the lateral lemniscus: a major source of inhibition to the inferior colliculus (168) 90
Bauer, E.E., see Pollak, G.D. (168) 60
Berrebi, A.S., see Kulesza Jr., R.J. (168) 12
Briede, T., see Langner, G. (168) 110
Burger, R.M., see Pollak, G.D. (168) 60

Caspary, D.M., Palombi, P.S. and Hughes, L.F.
GABAergic inputs shape responses to amplitude modulated stimuli in the inferior colliculus (168) 163
Chen, Q.C., see Jen, P.H.-S. (168) 139
Chen, Q.C., see Jen, P.H.-S. (168) 196
Chernock, M.L., see Winer, J.A. (168) 181
Cheung, S.W., see Winer, J.A. (168) 181

Ding, D., see Wang, J. (168) 238

Faingold, C.L.
Role of GABA abnormalities in the inferior colliculus pathophysiology – audiogenic seizures (168) 223
Fitzpatrick, D.C., see Batra, R. (168) 90
Fitzpatrick, D.C., Kuwada, S. and Batra, R.
Transformations in processing interaural time differences between the superior olivary complex and inferior colliculus: beyond the Jeffress model (168) 79

Garcia-Cairasco, N.
A critical review on the participation of inferior colliculus in acoustic-motor and acoustic-limbic networks involved in the expression of acute and kindled audiogenic seizures (168) 208
Goldstein-Daruech, N., Pedemonte, M., Inderkum, A. and Velluti, R.A.
Effects of excitatory amino acid antagonists on the activity of inferior colliculus neurons during sleep and wakefulness (168) 174

Hartung, K., see Trahiotis, C. (168) 55
Henderson Sabes, J., see Sinex, D.G. (168) 150
Hughes, L.F., see Caspary, D.M. (168) 163
Hurley, L.M., Thompson, A.M. and Pollak, G.D.
Serotonin in the inferior colliculus (168) 1

Inderkum, A., see Goldstein-Daruech, N. (168) 174

Jen, P.H.-S., Wu, F.J. and Chen, Q.C.
The effect of two-tone stimulation on responses of two simultaneously recorded neurons in the inferior colliculus of the big brown bat, *Eptesicus fuscus* (168) 139
Jen, P.H.-S., Zhou, X., Zhang, J., Chen, Q.C. and Sun, X.
Brief and short-term corticofugal modulation of acoustic signal processing in the bat midbrain (168) 196

Kelly, J.B., see Ma, C.L. (168) 25
Kelly, J.B. and Zhang, H.
Contribution of AMPA and NMDA receptors to excitatory responses in the inferior colliculus (168) 35
Klug, A., see Pollak, G.D. (168) 60
Kulesza Jr., R.J., Viñuela, A., Saldaña, E. and Berrebi, A.S.
Unbiased stereological estimates of neuron number in subcortical auditory nuclei of the rat (168) 12
Kuwada, S., see Fitzpatrick, D.C. (168) 79

Langner, G., Albert, M. and Briede, T.
Temporal and spatial coding of periodicity information in the inferior colliculus of awake chinchilla (*Chinchilla laniger*) (168) 110
Larue, D.T., see Winer, J.A. (168) 181
Li, H., see Sinex, D.G. (168) 150
Li, L. and Yue, Q.
Auditory gating processes and binaural inhibition in the inferior colliculus (168) 98

Ma, C.L., see Wu, S.H. (168) 43
Ma, C.L., Kelly, J.B. and Wu, S.H.
AMPA and NMDA receptors mediate synaptic excitation in the rat's inferior colliculus (168) 25

Oliver, D.L., see Wu, S.H. (168) 43

Palombi, P.S., see Caspary, D.M. (168) 163
Park, T.J., see Pollak, G.D. (168) 60
Pedemonte, M., see Goldstein-Daruech, N. (168) 174
Pollak, G.D., see Hurley, L.M. (168) 1
Pollak, G.D., Burger, R.M., Park, T.J., Klug, A. and Bauer, E.E.
Roles of inhibition for transforming binaural properties in the brainstem auditory system (168) 60
Portfors, C.V. and Wenstrup, J.J.
Excitatory and facilitatory frequency response areas in the inferior colliculus of the mustached bat (168) 131

Saldaña, E., see Kulesza Jr., R.J. (168) 12
Salvi, R.J., see Wang, J. (168) 238
Sinex, D.G., Henderson Sabes, J. and Li, H.
Responses of inferior colliculus neurons to harmonic and mistuned complex tones (168) 150
Sivaramakrishnan, S., see Wu, S.H. (168) 43
Sun, X., see Jen, P.H.-S. (168) 196

Thompson, A.M., see Hurley, L.M. (168) 1
Trahiotis, C. and Hartung, K.
Peripheral auditory processing, the precedence effect and responses of single units in the inferior colliculus (168) 55

Velluti, R.A., see Goldstein-Daruech, N. (168) 174
Viñuela, A., see Kulesza Jr., R.J. (168) 12

PII: S0378-5955(02)00531-2

Wang, J., Ding, D. and Salvi, R.J.
Functional reorganization in chinchilla inferior colliculus associated with chronic and acute cochlear damage (168) 238
Wenstrup, J.J., see Portfors, C.V. (168) 131
Winer, J.A., Chernock, M.L., Larue, D.T. and Cheung, S.W.
Descending projections to the inferior colliculus from the posterior thalamus and the auditory cortex in rat, cat, and monkey (168) 181
Wu, F.J., see Jen, P.H.-S. (168) 139
Wu, S.H., see Ma, C.L. (168) 25
Wu, S.H., Ma, C.L., Sivaramakrishnan, S. and Oliver, D.L.
Synaptic modification in neurons of the central nucleus of the inferior colliculus (168) 43

Yue, Q., see Li, L. (168) 98

Zhang, H., see Kelly, J.B. (168) 35
Zhang, J., see Jen, P.H.-S. (168) 196
Zhou, X., see Jen, P.H.-S. (168) 196

ELSEVIER

Hearing Research 168 (2002) 252–255

HEARING RESEARCH

www.elsevier.com/locate/heares

Subject Index Volume 168

5HT, 5-hydroxytryptamine (serotonin)
IC, inferior colliculus (Hurley, L.M. (168) 1)

Acoustic midbrain
Inferior colliculus; Audiogenic seizure; Audiogenic kindling; Neuroethology; Forebrain recruitment; Sensorimotor integration; Plasticity; Wistar audiogenic rat strain (Garcia-Cairasco, N. (168) 208)

Acoustic trauma
Plasticity; Inner hair cell; Chinchilla; Inhibition; Inferior colliculus (Wang, J. (168) 238)

α-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor
Auditory system; Hearing; Brain slice; Patch clamp recording; *N*-Methyl-D-aspartate receptor (Ma, C.L. (168) 25)

γ-Aminobutyric acid
Chinchilla; Inferior colliculus; Amplitude modulation; Inhibition (Caspary, D.M. (168) 163)

Inferior colliculus; Audiogenic seizure; Glutamate; Inhibition (Faingold, C.L. (168) 223)

AMPA
NMDA; Excitation; Inferior colliculus; Central nucleus (Kelly, J.B. (168) 35)

AMPA receptor
Long-term potentiation; Long-term depression; NMDA receptor; Auditory pathway; Patch clamp recording; Synaptic plasticity (Wu, S.H. (168) 43)

Amplitude modulation
Inferior colliculus; Latency; Envelope periodicity; Temporal processing; Neuronal map; Pitch perception (Langner, G. (168) 110)

Chinchilla; Inferior colliculus; Inhibition; γ-Aminobutyric acid (Caspary, D.M. (168) 163)

Audiogenic kindling
Inferior colliculus; Audiogenic seizure; Neuroethology; Acoustic midbrain; Forebrain recruitment; Sensorimotor integration; Plasticity; Wistar audiogenic rat strain (Garcia-Cairasco, N. (168) 208)

Audiogenic seizure
Inferior colliculus; Audiogenic kindling; Neuroethology; Acoustic midbrain; Forebrain recruitment; Sensorimotor integration; Plasticity; Wistar audiogenic rat strain (Garcia-Cairasco, N. (168) 208)

Inferior colliculus; γ-Aminobutyric acid; Glutamate; Inhibition (Faingold, C.L. (168) 223)

Auditory brainstem
Onset neuron; Auditory neurophysiology; Lateral tegmentum (Batra, R. (168) 90)

Auditory cortex
Bat; Corticofugal modulation; Facilitation; Frequency tuning; Inferior colliculus; Inhibition (Jen, P.H.-S. (168) 196)

Auditory gating
Prepulse inhibition; Precedence effect; Binaural inhibition; Inferior colliculus; Inhibitory transmission (Li, L. (168) 98)

Auditory neurophysiology
Auditory brainstem; Onset neuron; Lateral tegmentum (Batra, R. (168) 90)

Auditory pathway
Long-term potentiation; Long-term depression; AMPA receptor; NMDA receptor; Patch clamp recording; Synaptic plasticity (Wu, S.H. (168) 43)

Lateral superior olive; Medial superior olive; Interaural time differences; Sound localization (Fitzpatrick, D.C. (168) 79)

Auditory scene analysis
Inferior colliculus; Complex sound; Temporal coding; Electrophysiology (Sinex, D.G. (168) 150)

Auditory system
Hearing; Brain slice; Patch clamp recording; α-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor; *N*-Methyl-D-aspartate receptor (Ma, C.L. (168) 25)

Inferior colliculus; GABA; Binaural processing; Precedence effect; Lateral superior olive; Dorsal nucleus of the lateral lemniscus (Pollak, G.D. (168) 60)

Excitatory neurotransmitter; *N*-Methyl-D-aspartate; Kynurenic acid; Inferior colliculus; Sleep; Wakefulness; Cortical stimulation (Goldstein-Daruech, N. (168) 174)

Bat
Auditory cortex; Corticofugal modulation; Facilitation; Frequency tuning; Inferior colliculus; Inhibition (Jen, P.H.-S. (168) 196)

Binaural inhibition
Auditory gating; Prepulse inhibition; Precedence effect; Inferior colliculus; Inhibitory transmission (Li, L. (168) 98)

Binaural processing
Inferior colliculus; Auditory system; GABA; Precedence effect; Lateral

PII: S0378-5955(02)00532-4

superior olive; Dorsal nucleus of the lateral lemniscus (Pollak, G.D. (168) 60)

Biotinylated dextran amine
Thalamotectal; Posterior intralaminar system; Substantia nigra (Winer, J.A. (168) 181)

Brain slice
Auditory system; Hearing; Patch clamp recording; α-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor; *N*-Methyl-D-aspartate receptor (Ma, C.L. (168) 25)

Central nucleus
AMPA; NMDA; Excitation; Inferior colliculus (Kelly, J.B. (168) 35)

Chinchilla
Inferior colliculus; Amplitude modulation; Inhibition; γ-Aminobutyric acid (Caspary, D.M. (168) 163)

Plasticity; Inner hair cell; Acoustic trauma; Inhibition; Inferior colliculus (Wang, J. (168) 238)

Cochlear nucleus
Optical fractionator; Superior olivary complex; Lateral lemniscus; Inferior colliculus; Medial geniculate body (Kulesza Jr., R.J. (168) 12)

Communication sound
Inferior colliculus; Frequency tuning; Spectral integration; Facilitation; Mustached bat (Portfors, C.V. (168) 131)

Complex sound
Inferior colliculus; Auditory scene analysis; Temporal coding; Electrophysiology (Sinex, D.G. (168) 150)

Cortical stimulation
Excitatory neurotransmitter; Auditory system; *N*-Methyl-D-aspartate; Kynurenic acid; Inferior colliculus; Sleep; Wakefulness (Goldstein-Daruech, N. (168) 174)

Corticofugal modulation
Auditory cortex; Bat; Facilitation; Frequency tuning; Inferior colliculus; Inhibition (Jen, P.H.-S. (168) 196)

Dorsal nucleus of the lateral lemniscus
Inferior colliculus; Auditory system; GABA; Binaural processing; Precedence effect; Lateral superior olive (Pollak, G.D. (168) 60)

Electrophysiology
Inferior colliculus; Auditory scene analysis; Complex sound; Temporal coding (Sinex, D.G. (168) 150)

Envelope periodicity
Inferior colliculus; Amplitude modulation; Latency; Temporal processing; Neuronal map; Pitch perception (Langner, G. (168) 110)

Excitation
AMPA; NMDA; Inferior colliculus; Central nucleus (Kelly, J.B. (168) 35)

Excitatory neurotransmitter
Auditory system; *N*-Methyl-D-aspartate; Kynurenic acid; Inferior colliculus; Sleep; Wakefulness; Cortical stimulation (Goldstein-Daruech, N. (168) 174)

Facilitation
Inferior colliculus; Frequency tuning; Spectral integration; Communication sound; Mustached bat (Portfors, C.V. (168) 131)

Frequency tuning curve; Inferior colliculus; Suppression; Rate–amplitude function (Jen, P.H.-S. (168) 139)

Auditory cortex; Bat; Corticofugal modulation; Frequency tuning; Inferior colliculus; Inhibition (Jen, P.H.-S. (168) 196)

Forebrain recruitment
Inferior colliculus; Audiogenic seizure; Audiogenic kindling; Neuroethology; Acoustic midbrain; Sensorimotor integration; Plasticity; Wistar audiogenic rat strain (Garcia-Cairasco, N. (168) 208)

Frequency tuning
Inferior colliculus; Spectral integration; Facilitation; Communication sound; Mustached bat (Portfors, C.V. (168) 131)

Auditory cortex; Bat; Corticofugal modulation; Facilitation; Inferior colliculus; Inhibition (Jen, P.H.-S. (168) 196)

Frequency tuning curve
Facilitation; Inferior colliculus; Suppression; Rate–amplitude function (Jen, P.H.-S. (168) 139)

GABA
Inferior colliculus; Auditory system; Binaural processing; Precedence effect; Lateral superior olive; Dorsal nucleus of the lateral lemniscus (Pollak, G.D. (168) 60)

Glutamate
Inferior colliculus; Audiogenic seizure; γ-Aminobutyric acid; Inhibition (Faingold, C.L. (168) 223)

Hearing
Auditory system; Brain slice; Patch clamp recording; α-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor; *N*-Methyl-D-aspartate receptor (Ma, C.L. (168) 25)

IC, inferior colliculus
5HT, 5-hydroxytryptamine (serotonin) (Hurley, L.M. (168) 1)

Inferior colliculus
Optical fractionator; Cochlear nucleus; Superior olivary complex; Lateral lemniscus; Medial geniculate body (Kulesza Jr., R.J. (168) 12)

AMPA; NMDA; Excitation; Central nucleus (Kelly, J.B. (168) 35)

Auditory system; GABA; Binaural processing; Precedence effect; Lateral superior olive; Dorsal nucleus of the lateral lemniscus (Pollak, G.D. (168) 60)

Auditory gating; Prepulse inhibition; Precedence effect; Binaural inhibition; Inhibitory transmission (Li, L. (168) 98)

Amplitude modulation; Latency; Envelope periodicity; Temporal processing; Neuronal map; Pitch perception (Langner, G. (168) 110)

Frequency tuning; Spectral integration; Facilitation; Communication sound; Mustached bat (Portfors, C.V. (168) 131)

Facilitation; Frequency tuning curve; Suppression; Rate–amplitude function (Jen, P.H.-S. (168) 139)

Auditory scene analysis; Complex sound; Temporal coding; Electrophysiology (Sinex, D.G. (168) 150)

Chinchilla; Amplitude modulation; Inhibition; γ-Aminobutyric acid (Caspary, D.M. (168) 163)

Excitatory neurotransmitter; Auditory system; *N*-Methyl-D-aspartate; Kynurenic acid; Sleep; Wakefulness; Cortical stimulation (Goldstein-Daruech, N. (168) 174)

Auditory cortex; Bat; Corticofugal modulation; Facilitation; Frequency tuning; Inhibition (Jen, P.H.-S. (168) 196)

Audiogenic seizure; Audiogenic kindling; Neuroethology; Acoustic midbrain; Forebrain recruitment; Sensorimotor integration; Plasticity; Wistar audiogenic rat strain (Garcia-Cairasco, N. (168) 208)

Audiogenic seizure; γ-Aminobutyric acid; Glutamate; Inhibition (Faingold, C.L. (168) 223)

Plasticity; Inner hair cell; Acoustic trauma; Chinchilla; Inhibition (Wang, J. (168) 238)

Inhibition
Chinchilla; Inferior colliculus; Amplitude modulation; γ-Aminobutyric acid (Caspary, D.M. (168) 163)

Auditory cortex; Bat; Corticofugal modulation; Facilitation; Frequency tuning; Inferior colliculus (Jen, P.H.-S. (168) 196)

Inferior colliculus; Audiogenic seizure; γ-Aminobutyric acid; Glutamate (Faingold, C.L. (168) 223)

Plasticity; Inner hair cell; Acoustic trauma; Chinchilla; Inferior colliculus (Wang, J. (168) 238)

Inhibitory transmission
Auditory gating; Prepulse inhibition; Precedence effect; Binaural inhibition; Inferior colliculus (Li, L. (168) 98)

Inner hair cell
Plasticity; Acoustic trauma; Chinchilla; Inhibition; Inferior colliculus (Wang, J. (168) 238)

Interaural intensitive difference
Precedence effect; Peripheral interaction; Peripheral filtering; Interaural temporal difference (Trahiotis, C. (168) 55)

Interaural temporal difference
Precedence effect; Peripheral interaction; Peripheral filtering; Interaural intensitive difference (Trahiotis, C. (168) 55)

Interaural time differences
Lateral superior olive; Medial superior olive; Auditory pathway; Sound localization (Fitzpatrick, D.C. (168) 79)

Kynurenic acid
Excitatory neurotransmitter; Auditory system; *N*-Methyl-D-aspartate; Inferior colliculus; Sleep; Wakefulness; Cortical stimulation (Goldstein-Daruech, N. (168) 174)

Latency
Inferior colliculus; Amplitude modulation; Envelope periodicity; Temporal processing; Neuronal map; Pitch perception (Langner, G. (168) 110)

Lateral lemniscus
Optical fractionator; Cochlear nucleus; Superior olivary complex; Inferior colliculus; Medial geniculate body (Kulesza Jr., R.J. (168) 12)

Lateral superior olive
Inferior colliculus; Auditory system; GABA; Binaural processing; Precedence effect; Dorsal nucleus of the lateral lemniscus (Pollak, G.D. (168) 60)

Medial superior olive; Auditory pathway; Interaural time differences; Sound localization (Fitzpatrick, D.C. (168) 79)

Lateral tegmentum
Auditory brainstem; Onset neuron; Auditory neurophysiology (Batra, R. (168) 90)

Long-term depression
Long-term potentiation; AMPA receptor; NMDA receptor; Auditory pathway; Patch clamp recording; Synaptic plasticity (Wu, S.H. (168) 43)

Long-term potentiation
Long-term depression; AMPA receptor; NMDA receptor; Auditory pathway; Patch clamp recording; Synaptic plasticity (Wu, S.H. (168) 43)

Medial geniculate body
Optical fractionator; Cochlear nucleus; Superior olivary complex; Lateral lemniscus; Inferior colliculus (Kulesza Jr., R.J. (168) 12)

Medial superior olive
Lateral superior olive; Auditory pathway; Interaural time differences; Sound localization (Fitzpatrick, D.C. (168) 79)

Mustached bat
Inferior colliculus; Frequency tuning; Spectral integration; Facilitation; Communication sound (Portfors, C.V. (168) 131)

Neuroethology
Inferior colliculus; Audiogenic seizure; Audiogenic kindling; Acoustic midbrain; Forebrain recruitment; Sensorimotor integration; Plasticity; Wistar audiogenic rat strain (Garcia-Cairasco, N. (168) 208)

Neuronal map
Inferior colliculus; Amplitude modulation; Latency; Envelope periodicity; Temporal processing; Pitch perception (Langner, G. (168) 110)

NMDA
AMPA; Excitation; Inferior colliculus; Central nucleus (Kelly, J.B. (168) 35)

NMDA receptor
Long-term potentiation; Long-term depression; AMPA receptor; Auditory pathway; Patch clamp recording; Synaptic plasticity (Wu, S.H. (168) 43)

***N*-Methyl-D-aspartate**
Excitatory neurotransmitter; Auditory system; Kynurenic acid; Inferior colliculus; Sleep; Wakefulness; Cortical stimulation (Goldstein-Daruech, N. (168) 174)

***N*-Methyl-D-aspartate receptor**
Auditory system; Hearing; Brain slice; Patch clamp recording; α-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor (Ma, C.L. (168) 25)

Onset neuron
Auditory brainstem; Auditory neurophysiology; Lateral tegmentum (Batra, R. (168) 90)

Optical fractionator
Cochlear nucleus; Superior olivary complex; Lateral lemniscus; Inferior colliculus; Medial geniculate body (Kulesza Jr., R.J. (168) 12)

Patch clamp recording
Auditory system; Hearing; Brain slice; α-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor; *N*-Methyl-D-aspartate receptor (Ma, C.L. (168) 25)

Long-term potentiation; Long-term depression; AMPA receptor; NMDA receptor; Auditory pathway; Synaptic plasticity (Wu, S.H. (168) 43)

Peripheral filtering
Precedence effect; Peripheral interaction; Interaural temporal difference; Interaural intensitive difference (Trahiotis, C. (168) 55)

Peripheral interaction
Precedence effect; Peripheral filtering; Interaural temporal difference; Interaural intensitive difference (Trahiotis, C. (168) 55)

Pitch perception
Inferior colliculus; Amplitude modulation; Latency; Envelope periodicity; Temporal processing; Neuronal map (Langner, G. (168) 110)

Plasticity
Inferior colliculus; Audiogenic seizure; Audiogenic kindling; Neuroethology; Acoustic midbrain; Forebrain recruitment; Sensorimotor integration; Wistar audiogenic rat strain (Garcia-Cairasco, N. (168) 208)

Inner hair cell; Acoustic trauma; Chinchilla; Inhibition; Inferior colliculus (Wang, J. (168) 238)

Posterior intralaminar system
Thalamotectal; Substantia nigra; Biotinylated dextran amine (Winer, J.A. (168) 181)

Precedence effect
Peripheral interaction; Peripheral filtering; Interaural temporal difference; Interaural intensitive difference (Trahiotis, C. (168) 55)

Inferior colliculus; Auditory system; GABA; Binaural processing; Lateral superior olive; Dorsal nucleus of the lateral lemniscus (Pollak, G.D. (168) 60)

Auditory gating; Prepulse inhibition; Binaural inhibition; Inferior colliculus; Inhibitory transmission (Li, L. (168) 98)

Prepulse inhibition
Auditory gating; Precedence effect; Binaural inhibition; Inferior colliculus; Inhibitory transmission (Li, L. (168) 98)

Rate–amplitude function
Facilitation; Frequency tuning curve; Inferior colliculus; Suppression (Jen, P.H.-S. (168) 139)

Sensorimotor integration
Inferior colliculus; Audiogenic seizure; Audiogenic kindling; Neuroethology; Acoustic midbrain; Forebrain recruitment; Plasticity; Wistar audiogenic rat strain (Garcia-Cairasco, N. (168) 208)

Sleep
Excitatory neurotransmitter; Auditory system; *N*-Methyl-D-aspartate; Kynurenic acid; Inferior colliculus; Wakefulness; Cortical stimulation (Goldstein-Daruech, N. (168) 174)

Sound localization
Lateral superior olive; Medial superior olive; Auditory pathway; Interaural time differences (Fitzpatrick, D.C. (168) 79)

Spectral integration
Inferior colliculus; Frequency tuning; Facilitation; Communication sound; Mustached bat (Portfors, C.V. (168) 131)

Substantia nigra
Thalamotectal; Posterior intralaminar system; Biotinylated dextran amine (Winer, J.A. (168) 181)

Superior olivary complex
Optical fractionator; Cochlear nucleus; Lateral lemniscus; Inferior colliculus; Medial geniculate body (Kulesza Jr., R.J. (168) 12)

Suppression
Facilitation; Frequency tuning curve; Inferior colliculus; Rate–amplitude function (Jen, P.H.-S. (168) 139)

Synaptic plasticity
Long-term potentiation; Long-term depression; AMPA receptor; NMDA receptor; Auditory pathway; Patch clamp recording (Wu, S.H. (168) 43)

Temporal coding
Inferior colliculus; Auditory scene analysis; Complex sound; Electrophysiology (Sinex, D.G. (168) 150)

Temporal processing
Inferior colliculus; Amplitude modulation; Latency; Envelope periodicity; Neuronal map; Pitch perception (Langner, G. (168) 110)

Thalamotectal
Posterior intralaminar system; Substantia nigra; Biotinylated dextran amine (Winer, J.A. (168) 181)

Wakefulness
Excitatory neurotransmitter; Auditory system; *N*-Methyl-D-aspartate; Kynurenic acid; Inferior colliculus; Sleep; Cortical stimulation (Goldstein-Daruech, N. (168) 174)

Wistar audiogenic rat strain
Inferior colliculus; Audiogenic seizure; Audiogenic kindling; Neuroethology; Acoustic midbrain; Forebrain recruitment; Sensorimotor integration; Plasticity (Garcia-Cairasco, N. (168) 208)

HEARING RESEARCH

Vol. 168, Nos. 1–2
June 2002

CONTENTS

Cited in: Biological Abstracts (BIOSIS); Chemical Abstracts; Current Contents/Life Sciences; Current Awareness in Biological Sciences (CABS); Excerpta Medica (EMBASE); Index Medicus; INSPEC; PASCAL M; Reference Update; Full text available in ScienceDirect® and Neuroscion

Special Issue

Inferior colliculus: from past to future

Anatomical studies

L.M. Hurley, A.M. Thompson and G.D. Pollak (USA)
Serotonin in the inferior colliculus 1

R.J. Kulesza Jr., A. Viñuela, E. Saldaña and A.S. Berrebi (Spain, USA)
Unbiased stereological estimates of neuron number in subcortical auditory nuclei of the rat 12

Synaptic mechanisms

C.L. Ma, J.B. Kelly and S.H. Wu (Canada)
AMPA and NMDA receptors mediate synaptic excitation in the rat's inferior colliculus 25

J.B. Kelly and H. Zhang (Canada)
Contribution of AMPA and NMDA receptors to excitatory responses in the inferior colliculus 35

S.H. Wu, C.L. Ma, S. Sivaramakrishnan and D.L. Oliver (Canada, USA)
Synaptic modification in neurons of the central nucleus of the inferior colliculus 43

C. Trahiotis and K. Hartung (USA)
Peripheral auditory processing, the precedence effect and responses of single units in the inferior colliculus 55

Binaural processing

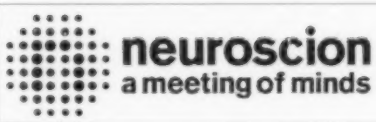
G.D. Pollak, R.M. Burger, T.J. Park, A. Klug and E.E. Bauer (USA)
Roles of inhibition for transforming binaural properties in the brainstem auditory system 60

D.C. Fitzpatrick, S. Kuwada and R. Batra (USA)
Transformations in processing interaural time differences between the superior olivary complex and inferior colliculus: beyond the Jeffress model 79

R. Batra and D.C. Fitzpatrick (USA)
Monaural and binaural processing in the ventral nucleus of the lateral lemniscus: a major source of inhibition to the inferior colliculus 90

L. Li and Q. Yue (PR China)
Auditory gating processes and binaural inhibition in the inferior colliculus 98

Contents continued on inside back cover



To view articles from this journal, visit Neuroscion, the comprehensive neuroscience information service on the web.
Register today at **www.neuroscion.com**